

Warner A. Broughman III
and Associates

RECEIVED

NOV 21 2007

PUBLIC SERVICE
COMMISSION

3161 Custer Dr, Suite 6 Lexington, Kentucky 40517

(859) 271-9118

November 19, 2007

Mark D. Goss, Chairman
Public Service Commission
P.O. Box 615
Frankfort, KY 40602

Re: Case No. 2007-00134
Kentucky-American Certificate
of Convenience and Necessity

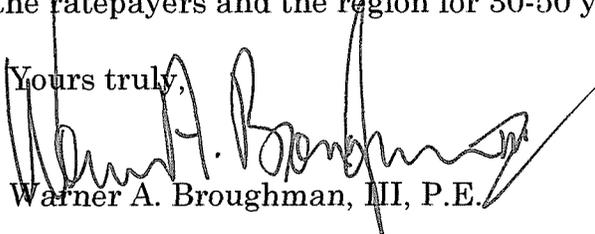
Dear Chairman Goss:

Thank you and the other Commission members for the time you took to listen to the public express their concerns about the plan put forth by Kentucky-American. As I told you at the public hearing, the cost difference between a Louisville pipeline and a treatment plant in Owen County is astounding. The attached documentation shows that the ratepayers of Kentucky American will pay more than \$173 million in extra costs for the ill-conceived Owen County plant. No one seems to be talking about money, "just solve the drought". We simply must be more accountable to tax payers, considering the largeness of the other needs facing Kentuckians.

The long term solution, everyone agrees, involves a connection to the Ohio River, so let's get that done now. The COMMISSION needs to address the water requirements of all of Central Kentucky by requiring Kentucky-American to construct a pipeline to connect to the Louisville Water Company at Shelbyville. Public policy cries out for leadership in solving all of Central Kentucky's water woes, not just Lexington and Kentucky-American's.

A pipeline connection to Louisville meets the long-term needs of the entire region, adds to the drought-proofing needs, protects against localized catastrophe, is cost effective for the ratepayers and will do a minimum amount of damage to the environment. This solution also meets the statutory requirements regarding wasteful duplication of services.

Thank you for asking for input from the entire region. This decision will have a positive or negative impact on the ratepayers and the region for 30-50 years.

Yours truly,

Warner A. Broughman, III, P.E.

WAB:pac

AN ECONOMIC ANALYSIS OF THE ALTERNATIVES TO
SECURING ADDITIONAL WATER SUPPLY FOR
LEXINGTON, KENTUCKY

PRESENTATION
DEVELOPED BY

WARNER A. BROUGHMAN, III, P.E., PRESIDENT
OF WARNER A. BROUGHMAN III & ASSOCIATES,
A LEXINGTON, KY CONSULTING ENGINEER

Graduate of the University of Kentucky with a
B.S. in Civil Engineering

Mr. Broughman has lived in Lexington for most of his life except some early years in Louisville and Army service in the Viet Nam Conflict. As a Lexington resident he is a concerned Rate Payer.

Additionally, he has represented clients before the Kentucky Public Service Commission and other regulatory agencies on water utility matters for 35 years.

AN ECONOMIC ANALYSIS OF THE ALTERNATIVES TO
SECURING ADDITIONAL WATER SUPPLY FOR
LEXINGTON, KENTUCKY

1. KENTUCKY AMERICAN PLAN: PHASE I: PIPELINE TO OWEN COUNTY, KENTUCKY THROUGH UNDEVELOPED SCENIC AND ENVIRONMENTALLY SENSITIVE AREAS OF CENTRAL KENTUCKY AND A NEW WATER TREATMENT PLANT AT THE SMALL COMMUNITY OF MONTEREY.
2. PHASE II: PIPELINE TO THE OHIO RIVER THROUGH UNDEVELOPED OWEN AND CARROLL COUNTIES.
3. PIPELINE TO LOUISVILLE WATER COMPANY (LWC) WHICH WILL BE EXTENDED TO THE EASTERN I-64 EXIT AT SHELBYVILLE WITH THE COST OF THE WESTERN PORTION TO BE BOURNE BY LWC. IT IS EXPECTED THAT THIS ROUTE WOULD FOLLOW I-64 (A PREVIOUSLY DISTURBED AREA WHERE OTHER UTILITIES ARE PRESENT).

Kentucky American Base Cost

KY American states in their filing that the new treatment works will operate at 6 MGD most days, 20 MGD some days. The following operating costs are also found in the filing.

Labor	\$523,182
Maintenance	360,000
Power	588,159
Chemicals	153,300
Security	300,000
Depreciation	2,943,666
Taxes	<u>1,156,649</u>
Sub Total	\$6,024,956

Additional costs:

Debt Service	\$12,227,442	\$160,000,000 @ 5% for 20 years
Profit	<u>1,825,240</u>	PSC allowed 10%
Total	\$20,077,638	

6MGD x 365 days = 2,190,000 thousand gallons

$\frac{\$20,077,638}{2,190,000} = \9.17 per 1000 gallons (this does not include any administrative, distribution, KY River Authority Fees, taxes or other costs)

FOR EACH ADDITIONAL 1 MGD

Power cost for treatment plant	\$25,063
Power for pumping thru pipeline	\$18,231
Chemical cost	\$25,550
Profit for 1 MGD	<u>\$ 6,884</u>
Total	\$75,728

Louisville Water Company Base Cost

Using the same 6 MGD start-up pumping, the following costs are developed:

Power Cost	\$100,000	
Maintenance	150,000	
Debt Service	<u>3,968,432</u>	\$55,000,000 @ 4.25% for 20 years
Total	\$4,218,432	

6 MGD x 365 days = 2,190,000 thousand gallons

$$\frac{\$4,218,432}{2,190,000} = \$1.93$$

$$\text{Purchased water} = \underline{\$1.71}$$

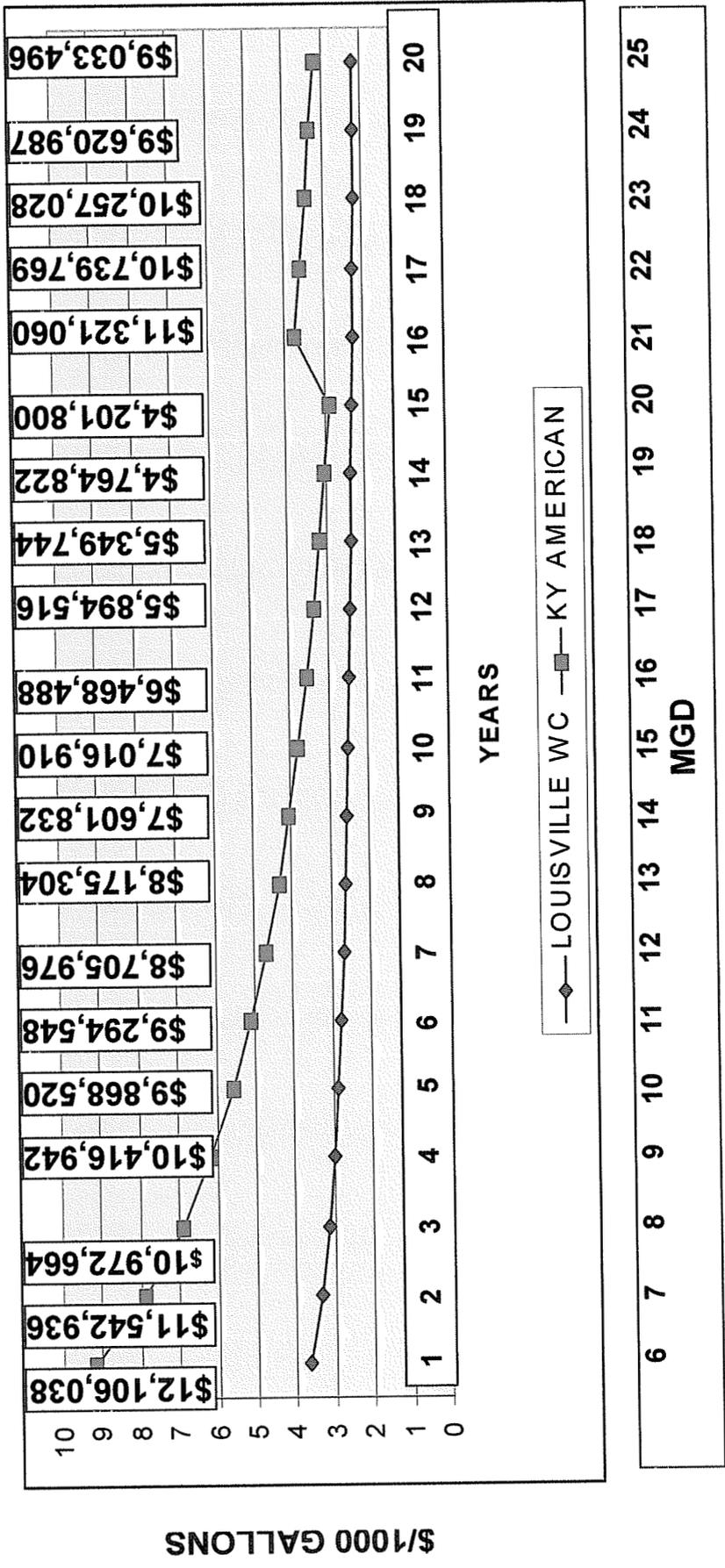
$$1^{\text{st}} \text{ Year Total} = \$3.64$$

FOR EACH ADDITIONAL 1 MGD

$$\text{Power Cost for Pumping} = \$17,000$$

LOUISVILLE PIPELINE VS. OWEN PLANT & PIPELINE COMPARISON

Year	CUMULATIVE LOSSES
1	\$12,106,038
2	\$23,649,024
3	\$34,621,688
4	\$45,038,630
5	\$54,907,150
6	\$64,201,698
7	\$72,907,674
8	\$81,083,478
9	\$88,685,310
10	\$95,702,220
11	\$102,170,708
12	\$108,065,224
13	\$113,414,968
14	\$118,179,790
15	\$122,381,590
16	\$133,702,650
17	\$144,442,419
18	\$154,699,447
19	\$164,320,434
20	\$173,403,930



Phase II
Kentucky American to Ohio River

21 MGD to start increasing to 35 MGD over 15 years

20 MGD Cost =	\$21,137,800	
1 MGD Added =	75,728	O & M for plant
	18,231	Power for pump from Ohio River
	<u>\$ 7,642,151</u>	\$100,000,000 @ 5% for 20 yrs.
 TOTAL	 \$28,873,910	

Cost per 1,000 gallons = $\frac{\$28,873,910}{7,665,000} = \$3.77/1,000$ gallons
At 21 MGD rate

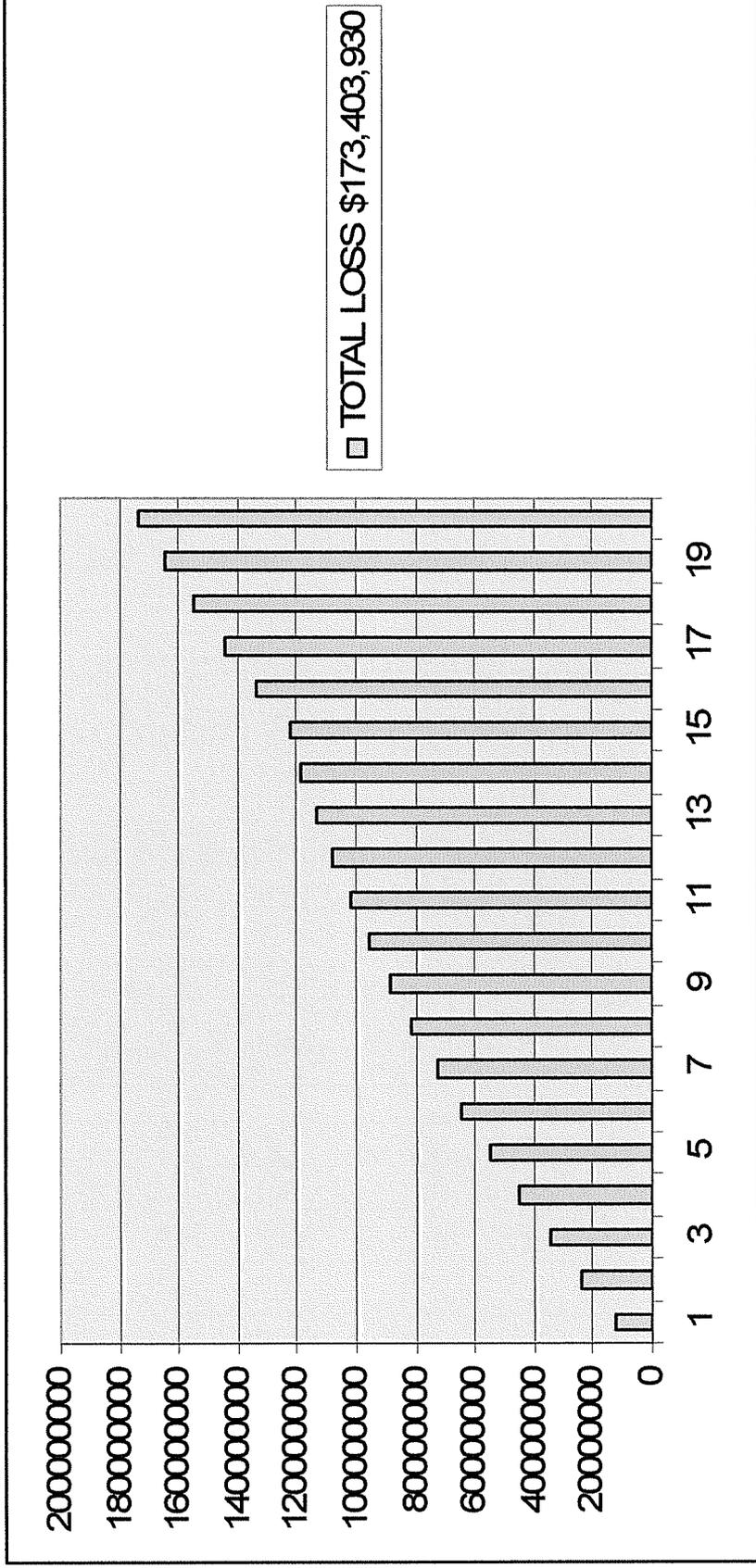
FOR EACH ADDITIONAL 1 MGD PRODUCED

	\$75,728	O & M Costs
	18,231	Power Costs for Ohio BPS
 TOTAL	 \$93,959	

LWC PUMPING ADDITIONAL 15 MGD

Assume Pump Upgrade at \$100,000
Amortized for 20 yrs @ 4.25% = \$7,215/year
Additional Power = \$17,000

EXTRA COST TO RATE PAYERS OVER A 20 YEAR PERIOD



Cost-effective Solution:

Both phases of the Kentucky American proposal will cost \$265 million dollars. This involves a huge investment in a water treatment plant, 2 water intake stations and about 57 miles of pipeline—26 miles from the Ohio to Pool 3 and another 31 from Pool 3 to northern Fayette County. The Louisville Water Company proposal will cost an estimated \$55 million dollars and will not require the construction of a water treatment plant and 2 water intake stations. Our proposal will require at least 19 fewer miles of pipeline and save the rate payers more than \$173,000,000 over twenty years.

Conclusion

A cost effective, reliable, drought-proof solution to the long-term water needs of central Kentucky must be selected over a short-term, unreliable, inadequate and costly proposal. The connection of Louisville and Lexington water suppliers, using the Ohio River as a source, achieves the stated goals of the Bluegrass Water Supply Commission and Kentucky American Water Company. It provides all ratepayers with the low cost solution, and shows that regional cooperation can make a big difference.